AMENDMENTS TO THE CLAIMS

The following is a complete listing of revised claims with a status identifier in parenthesis.

1-4. (Canceled)

5. (Currently Amended) The method according to claim [[4]]16, wherein the variables comprise at least header and trailer field values, initial and current buffer positions used during encoding and decoding of the layer message for the associated communication network layerand addresses to other contexts.

6. (Currently Amended) The method according to claim [[4]]16, wherein the methods comprise at least methods for encoding and decoding, one method decoding being a method for furnishing a context of a message.

7. (Original) The method according to claim 6, wherein the method for encoding comprises a method for computing message body dependent fields to include message length and CRC fields.

8. (Currently Amended) The method according to claim [[1]]16, wherein the step of encoding comprises the steps of:

incrementing a current buffer position by a header length for the layer message of the previous communication network layerof a first layer in the linked plurality of layers;

setting the ~~current~~ <u>initial</u> buffer position <u>value in the context for a subsequent</u> <u>network communication layer</u> equal to the buffer position obtained [[by]]<u>from the</u> incrementing <u>step</u> ~~the current buffer position by the header length of the first layer~~; and

repeating the incrementing and setting steps for each <u>subsequent communication</u> <u>network layer</u>~~of the remaining linked layers~~.

9. (Canceled)

10. (Currently Amended) The method according to claim 8, further comprising the step of:

terminating buffer incrementing upon detection of an end-of-layer ~~context~~ <u>message</u> indicator.

11. (Currently Amended) The method according to claim 8, further comprising the steps of:

moving header field data of each layer <u>message</u> ~~context in the buffer~~ into a message stream; and

moving trailer field data of each layer ~~context~~ <u>message</u> into the message stream, wherein the movement of the header field data and trailer field data results in a formatted message stream having disposed therein encoded data obtained from the linked plurality of layer ~~contexts~~ <u>messages</u>.

12. (Currently Amended) The method according to claim 11, wherein the trailer field data associated with each layer ~~context~~ <u>message</u> comprises CRC/FCS data.

13. (Currently Amended) The method according to claim [[1]]<u>16</u>, wherein the step of linking entails linking layer ~~contexts~~ <u>messages</u> comprising unformatted layer values.

14. (Currently Amended) The method according to claim [[1]]<u>16</u>, wherein the encoding step encodes each layer ~~context~~ <u>message</u> of the linked plurality of layer ~~contexts~~ <u>messages</u> into a single buffer.

15. (Currently Amended) A method for processing a ~~formatted~~ layered message for transmission over a communication network <u>having a layered architecture to form</u> a[[, the]] formatted layered message having encoded data, ~~the processing of the~~ ~~formatted layered message~~ comprising ~~the steps of:~~.

combining unformatted elements by linking a plurality of layer ~~contexts~~ <u>messages</u> based on addresses <u>of contexts for the communication network layers, each</u> <u>context associated with one of the plurality of communication network layers and</u> <u>providing variables and methods for the associated communications network layer</u>; and

~~using a method, based on the combining step, on~~ <u>processing</u> the unformatted elements to form the formatted layered message <u>after the combining step</u>.

16. (New) A method of processing a message in a communication network having a layered architecture, the method comprising:

linking a plurality of layer messages by including an address of a context for a previous communication network layer in layer message of a subsequent communication network layer, each context associated with a communication network layer and providing variables and methods for the associated communication network layer; and

encoding each layer message after the step of linking is complete.

17. (New) The method according to claim 16, wherein the linking step comprises:

passing an address of a context for the previous communication network layer to the subsequent communication network layer, which is adjacent to the previous communication network layer; and

setting a message body address of the layer message for the subsequent communication network layer to the passed address.

18. (New) The method according to claim 8, wherein the incrementing step comprises:

summing, when a header length for a communication network layer is variable, header lengths for each previous communication network layer; and

incrementing the current buffer position by the sum.